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EXAMINER

NGUYEN, KHAI MINH

ART UNIT

PAPER NUMBER

2684

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3

Please find below and/or attached an Office communication concerning this application or proceeding.

✓

# Office Action Summary

Application No.

10/001,295

Applicant(s)

MIRIYALA ET AL.

Examiner

Khai M Nguyen

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1- 9, 19 rejected under 35 U.S.C. 102(e) as being anticipated by  
Fraccaroli (US-6549768)

Regarding claim 1, Fraccaroli teaches a location-based grouping method for a wireless communications system, comprising:

defining a plurality of zones within a wireless network coverage area (fig.1, col.3, lines 39-44);

assigning a dynamic network subscriber group number to each of the plurality of zones within the network coverage area (fig.1, col.4, lines 39-65);

maintaining both a static network subscriber group database containing network--wide subscriber subscription parameters and a dynamic network subscriber group database containing zone-specific network subscriber subscription parameters (fig.1, col.4, lines 39-65); and

requiring a network subscriber to register and provide the dynamic network subscriber group number (col.4, lines 51- 65) when the network subscriber enters into one of the plurality of zones-within the wireless network coverage area to thereby identify a location of the network subscriber as being within the one of the plurality of zones within the network coverage area and to consequently provide services to the network subscriber based on the static and dynamic network subscriber group (col.4, lines 51- 65) subscription parameters associated with the network subscriber ( fig.1, col.4, line 23 to col.5, line 36).

Regarding claim 2, Fraccaroli teaches the method of claim 1, wherein the requiring a network subscriber to register and provide the dynamic network subscriber group number when the network subscriber enters into one of the plurality of zones within the wireless network coverage area comprises requiring the network subscriber to provide GPS-based location information (fig.1, col.6, lines 46-59) when the network subscriber enters the one of the plurality of zones within the network coverage area to thereby identify the location of the network subscriber ( col.6, line 60 to col.7, line31).

Regarding claim3, Fraccaroli teaches the method of claim 2, further comprising periodically downloading a zone group mapping table (col.7, line 61 to col.8, line 14) to the network subscriber to enable the network subscriber to determine its location within the one of the plurality of zones within the network coverage area based on the

GPS-based location information (fig.1, col.6, lines 46-59) and corresponding information in the zone group lookup table (col.8, lines 9-14).

Regarding claim 4, Fraccaroli teaches the method of claim 3, further comprising requiring the network subscriber to provide the corresponding information in the zone-group mapping table to thereby identify the location of the network subscriber (col.8, lines 8 –32).

Regarding claim 5, Fraccaroli teaches the method of claim 1, further comprising requiring the network subscriber to deregister when the network subscriber leaves (col.9, line 50 to col.10, line 15), the one of the plurality of zones within the network coverage area.

Regarding claim 6, Fraccaroli teaches the method of claim 1, further comprising transmitting zone-specific messages (col.9, lines 41-49) to the network subscriber after the requiring a network subscriber to register and provide the dynamic network subscriber group number when the network subscriber enters into one of the plurality of zones within the wireless network coverage area (see fig.1, col.3, lines 39-54).

Regarding claim 7, Fraccaroli teaches the method of claim 6, wherein the transmitting of zone-specific messages to the network subscriber comprises transmitting zone-specific messages (col.9, lines 41-49) to the network subscriber only when the

network subscriber belongs to both a predetermined static network subscriber group and a dynamic network subscriber group corresponding to the one of the plurality of zones within the network coverage area (see fig.1, col.10, lines 40-67).

Regarding claim 8, Fraccaroli teaches the method of claim 1, wherein the requiring a network subscriber to register and provide the dynamic network subscriber group number (col.4, lines 51- 65) when the network subscriber enters into one of the plurality of zones within the wireless network coverage area comprises requiring a plurality of network subscribers to register when each of the plurality of network subscribers enters respective ones of the plurality of zones within the network coverage area to thereby identify a location of each of the plurality of network subscribers as being within the respective ones of the plurality of zones within the network coverage area and to consequently provide services to the plurality of network subscribers based on static and dynamic network subscriber group subscription parameters associated with each of the plurality of network subscribers (see fig.1, col.10, lines 16-39).

Regarding claim 9, Fraccaroli teaches the method of claim 1, further comprising notifying the network subscriber when one or more subscribers belonging to a static network subscriber group matching that of the network subscriber are also registered within the one of the plurality of zones within the network coverage area (col.8, line 56 to col.9, line 20).

Regarding claim 10, Fraccaroli teaches the method of claim 1, further comprising transmitting an alert to a subscriber controlling entity when the one of the plurality of zones within the network coverage area entered into by the network subscriber varies from a set zone entry pattern authorized by the subscriber controlling entity (col.3, line 56 to col.4, line 11, col.10, lines 40-67).

Regarding claim 19, Fraccaroli teaches a wireless communications network tracking system, comprising:

a plurality of network transmitters each for defining a network coverage area (see fig.1, col.3, line 56 to col.4, line 11); and

a network service provider for dividing the network coverage area into a plurality of network coverage zones (col.5, lines 38-61, col.3, lines 39-44), for maintaining both a static network subscriber group database containing network-wide subscriber subscription parameters and a dynamic network subscriber group database containing zone-specific network subscriber subscription parameters (see fig.1, col.4, lines 39-63), and for receiving registration information from a network subscriber programmed to report thereto when the network subscriber enters into one of the plurality of zones within the network coverage area to thereby identify a location of the network subscriber as being within the one of the plurality of zones within the network coverage area and to consequently provide services to the network subscriber based on the static and dynamic network subscriber group (col.4, lines 51-65) subscription parameters associated with the network subscriber (see fig.1, col.4, line 23 to col.5, line36).

***Claim Rejections - 35 USC § 103***

2.The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-18,20-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Fraccaroli (US-6549768) in view of Slettengren (Pub-20020028674).

Regarding claim 11, Fraccaroli teaches a location-based grouping method for a wireless communications system, comprising:

defining a plurality of zones within a wireless network coverage area (see fig.1, col.3, lines 39-44);

assigning a dynamic network subscriber group number to each of the plurality of zones within the network coverage area (see fig.1, col.4, lines 39-65);

maintaining both a static network subscriber group database containing network--wide subscriber subscription parameters and a dynamic network subscriber group database containing zone-specific network subscriber subscription parameters (see fig.1, col.4, lines 39-65);

requiring a network subscriber to register and provide the dynamic network subscriber group number when the network subscriber enters into one of the plurality of zones within the wireless network coverage area to thereby identify a location of the network subscriber as being within the one of the plurality of zones within the network



coverage area and to consequently provide services to the network subscriber based on the static and dynamic network subscriber group (col.4, lines 51-65) subscription parameters associated with the network subscriber ( see fig.1, col.4 line 23 to col.5, line36).

Fraccaroli fails to specifically disclose a transmitting zone coordinate data to a network subscriber via a short-range wireless communication link (paragraph 0029). However, Slettengren teaches a transmitting zone coordinate data to a network subscriber via a short-range wireless communication link (paragraph 0029). Therefore it would have been obvious to one of ordinary skill the art at the time the invention was made to use a transmitting zone coordinate data to a network subscriber via a short-range wireless communication link (paragraph 0029) as taught by Slettengren with Fraccaroli teaching in order to use a device configured to operate in any one of these types of wireless communications system.

Regarding claim 12, fraccaroli in views of Slettengren disclose the method as recited in the rejection of claim 11, wherein the transmitting of zone coordinate data to a network subscriber via a short-range wireless communication link comprises transmitting zone coordinate data to a network subscriber via at least one of a Bluetooth<sup>TM</sup> and an infrared signal transmitting device (col.11, lines 11-29,garagraph 0030).

Regarding claim 13, fraccaroli in views of Slettengren disclose the method as recited in the rejection of claim 11, further comprising requiring the network subscriber to deregister when the network subscriber leaves the one of the plurality of zones within the network coverage area (col.9, line 50 to col.10, line 15).

Regarding claim 14, fraccaroli in views of Slettengren disclose the method as recited in the rejection of claim 11, further comprising transmitting zone-specific messages (col.9, lines 41-49) to the network subscriber after the requiring a network subscriber to register and provide the dynamic network subscriber group number when the network subscriber enters one of the plurality of zones within the wireless network coverage area (see fig.1, col.3, lines 39-54).

Regarding claim 15, fraccaroli in views of Slettengren disclose the method as recited in the rejection of claim 14, wherein the transmitting of zone-specific messages (col.9, lines 41-49) to the network subscriber comprises transmitting zone-specific messages to the network subscriber only when the network subscriber belongs to both a predetermined static network subscriber group and a dynamic network subscriber group corresponding to the one of the plurality of zones within the network coverage area (see fig.1, col.10, lines 40-67).

Regarding claim 16, fraccaroli in views of Slettengren disclose the method as recited in the rejection of claim 11, wherein the requiring a network subscriber to

register and provide the dynamic network subscriber group number (col.4, line 51-65) when the network subscriber enters into one of the plurality of zones within the wireless network coverage area comprises requiring a plurality of network subscribers to register when each of the plurality of network subscribers enters respective ones of the plurality of zones within the network coverage area to thereby identify a location of each of the plurality of network subscribers as being within the respective ones of the plurality of zones within the network coverage area and to consequently provide services to the plurality of network subscribers based on static and dynamic network subscriber group subscription parameters associated with each of the plurality of network subscribers (see fig.1, col.10, line16-39) .

Regarding claim 17, fraccaroli in views of Slettengren disclose the method as recited in the rejection of claim 11, further comprising notifying the network subscriber when one or more subscribers belonging to a static network subscriber group matching that of the network subscriber are also registered within the one of the plurality of zones within the network coverage area (col.8, line 56 to col.9, line20).

Regarding claim 18, fraccaroli in views of Slettengren disclose the method as recited in the rejection of claim 11, further comprising transmitting an alert to a subscriber controlling entity when the one of the plurality of zones within the network coverage area entered into by the network subscriber varies from a set zone entry

pattern authorized by the subscriber controlling entity (col.3, line 56 to col.4, line 11, col.10, lines 40-67).

Regarding claim 21, Fraccaroli in views of Slettengren disclose the method as recited in the rejection of claim 19, further comprising a plurality of short range, low power transmitting devices strategically placed throughout the network coverage area to define the plurality of network coverage zones (col.11, lines 11-29, paragraph 0030).

Claims 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Fraccaroli (US-6549768) in view of Bantz (US-5519706).

Regarding claim 20, Fraccaroli teaches a wireless communications network tracking system of claim 19 (see fig.1, col.4, line 23 to col.5, line 36),

Fraccaroli fails to specifically disclose the business unit for purchasing tracking services from the network service provider to enable the business unit to receive static and dynamic network subscriber group tracking information from the network service provider. However, Bantz teaches the business unit for purchasing tracking services from the network service provider to enable the business unit to receive static and dynamic network subscriber group tracking information from the network service provider (col.2, lines 30-36, col.2, line 57 to col.3, line 60). Therefore it would have been obvious to one of ordinary skill the art at the time the invention was made to use the business unit for purchasing tracking services from the network service provider to enable the business unit to receive static and dynamic network subscriber group

tracking information from the network service provider (col.2, lines 30-36, col.2, line 57 to col.3, line 60) as taught by Bantz with Fraccaroli teaching in order, so that called party or subscriber will not miss any important messages.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M Nguyen whose telephone number is 703.05.3906. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703.308.7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Khai, Nguyen  
Art Unit: 2684

5/25/2002

  
**NICK CORSARO**  
**PATENT EXAMINER**